

MSFC

Safety and Health Manager's Meeting 2005

Dennis Davis Industrial Safety Team Lead

George C. Marshall Space Flight Center

February 1 – March 4, 2005

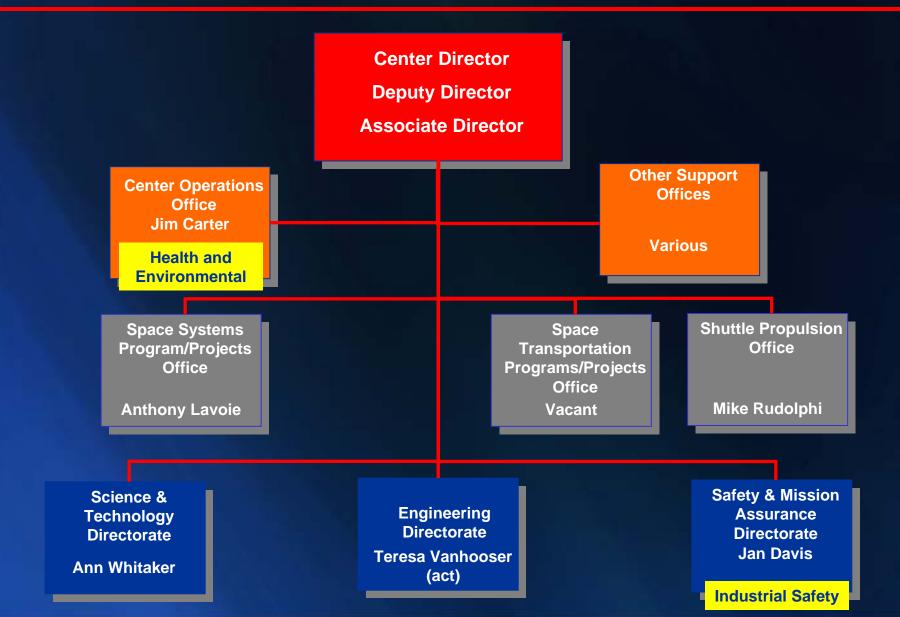


Agenda

- How We've Reorganized
- Things We're Already Doing
 - Supervisor Safety Web Page (SSWP) Improvements
 - Inventory of Hazardous Operations (IHOPS)
 - SHE Finding Tracking System (SHEtrak)
 - Customer Searching System (Safety Search)
 - Contractor Self-Evaluation Recognition System
 - > 3rd Party Assessment
- Things We're Working On
 - Simplified Employee Reporting Process
 - Top Level Risk Assessments
- How We're Doing
- Something We're Recommending Risk Safe 6
- A Mishap We've Had High Pressure Fitting Mishap



How We've Reorganized (Simplified)





Supervisor Safety Web Page

- Quick, easy web-based recordkeeping for safety meetings and walk-throughs (Civil Service and Contractors)
- Instant graphic metrics by organization with drill down capability to sub-organizations
- Supporting information (i.e.
 Presentation charts, inspection checklist, personnel listings, etc.)
- New Built-in Finding and Action tracking system with automatic work order generation or e-mail notification

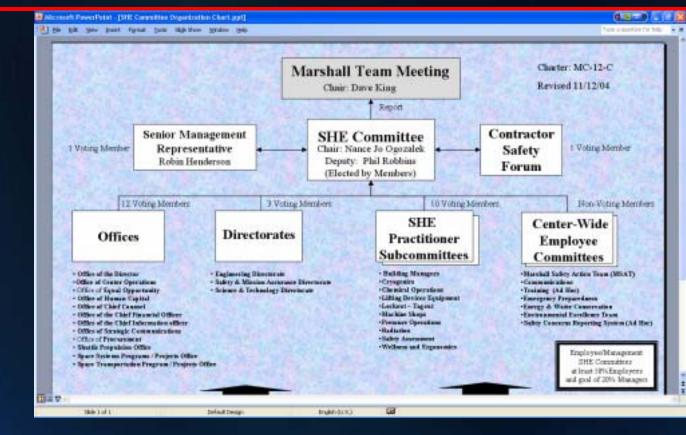


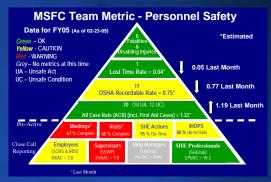




SHE Committee

- New arrangement, more employee involvement
- Subcommittees
 - Practitioner
 - Center-wide issues
- Contractor Safety Forum
- Monthly Marshall Team Meetings with metric presentations
- Currently looking at ways to improve





	SHE Program Metrics											Results			
	Supv.	Supv.			Actions						Mishaps				
	Meet (Last Month)	Visit (Last Month)	Supv. Finding s Ratio	IHOP	SHE	CAITS	Mis	shaps	SHE	trak	ak SCRS		Injury		Loss
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HS	81	100	2.5	82			-1	0	1	0	- 1	0	2	2.02	0
IS	93	68	0	100			0	0	3	0	0	0	0	0	0
LS	67	100	0	NA		•	0	0	0	0	0	0	0	0	0
os	67	100	0	NA			0	0	0	0	0	0	0	0	0
PS	78	100	0	100			0	0	0	0	0	0	0	0	0
RS	65	100	0	NA			0	0	0	0	0	0	0	0	0
MP	43	100	0	100	•	•	0	0	1	0	0	0	0	0	0
NP	18		0	NA			6	6	0	0	0	0	0	0	0
SP	69	43	0	NA		•	9	4	6	0	0	0	0	0	0
QD	70	91	0	NA			-1	0	0	0	-1	0	0	0	0
AD	90	83	1.6	100			2	0	22	2	10	0	12	3.19	0
ED	68	65	35.0	82			2	0	134	0	3	0	3	0.58	0
XD	70	100	0	79			-1	0	182	11	-1	0	0	0	0





IHOPs

- Web based log for hazardous operations with listing of assessments
- Checklists to help assure code compliance
- Each Entry Checked by Industrial Safety
- Responsible organization must update at least annually
- Automatic e-mail reminders



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SHEtrak

- Web Based Safety Health and Environmental finding tracking system
- Handheld input capability
- Violation and code listings
- Direct input by responsible actionee
- Automatic interface with Facilities Work Order System
 - Automatic Work Order Generation
 - Automatic Work Order Closure Notification
- Automatic E-mail ticklers
- Abatement plan and closure review process

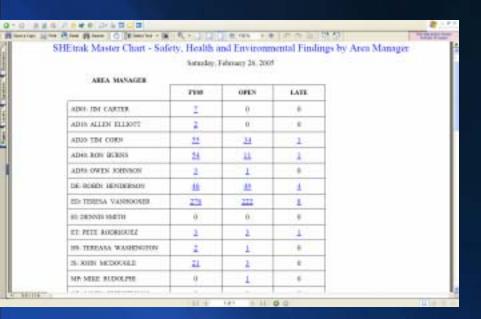






Safety Search

- Customer friendly web page for searching all SHE related database for open actions
- Master Chart provides numbers of open and late findings with links to detail listing!





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Finding 11064	Building 6007	Magn 150 B	Location 4007	COME VIOLEDS ALLOND ALARM IS NEEDED IN AREA 2800 VIOUAL ALARM IS NEEDED IN AREA	Status Crosed	DueDate Hax FVIII. 0107/0505
11072	4451	113	Room \$3 Panel South of	MPROPER LOCKOUT/TAGOUT	Closed	01116/2005
11082	MESASS	8204	PALLE	Tag Not Pilled Out Properly (Sid personnel took over fluir minutes to determine where the altern use, and who was going to stay. This indicates either an outdeted plan or failure to follow	Closed	01/28/2005
11106	4207	82		the established evacuation plan. ELECTRICAL PANEL NOT PROPERLY LABELED TO NOCATE FUNCTION OR EQUIPMENT BEND POWERED	Closed	02/10/2009
11106	4207	STATE-		WATER ON FLOOR CREATES SUPPING HAZARD	Closed	02/10/2008
11108	4007	127	6-9	WATER ON FLOOR CREATES SLEPPING HAZARO	Closed	02/10/2005
11118	4207	6-11	Doe/24	ELECTRICAL PANEL NOT PROPERLY LABBLED TO NOICATE PUNCTION OR EQUIPMENT RENG POWERED	Cinned	02/10/2009



Contractor Self-Evaluations

- Contractors required to selfevaluate their S&H program based on VPP elements
- Scores verified by S&MA review
- Contractors with high scores recognized
 - Level I Public AwardPresentation at MTM
 - Level II Formal letter of commendation

Contractor Evaluation System

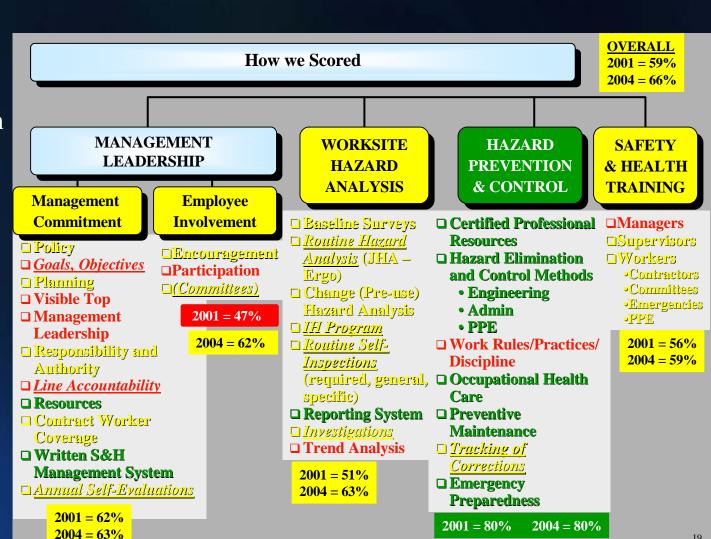
	Commitment and In	rolvement (Element 1)	Worksite System and	Hazard Prevention	Safety and Health	
Score	A. Management	B. Employee	Analysis (Element 2)	and Control (Element 3)	Training (Element 4)	
10	Benchmarking indicates "best in Class." In areas of visible management leadership, responsibility/accountability, meaningful metrics, and incentive/recognition systems.	Employees fully involved, safety committees functioning well, is a complete behavior process functioning at least one year, employees involved in process planning and risk assessment.	All subelements fully in place and functioning well for at least one year.	All programs and subelements fully functioning for one year. Strong professional support.	All training processes functioning, all levels of personnel trained to identified needs, management training ongoing.	
9	All subelements are in place and functioning well, but have as yet to reach full maturity.	All processes functioning but for limited time, employees involved to great extent.	All subelements in place, employees actively participating.	All programs and subelements in place and functioning.	All training processes established, management initial training complete.	
8	One subelement not fully in place but all are being implemented.	Most processes in place, employee involvement growing.	All subelements functioning, employee participation growing.	At least five subelements functioning and one in final stage of implementation.	Most personnel trained to identified needs, training recordkeeping and recall system functioning.	
7	Two subelements not fully implemented. Implementation in process on all elements. Employee participation and commitment widespread.	Process activities expanding through organization. Committees and teams functioning.	At least five subelements functioning and remainder established.	At least four subelements functioning, remaining two developing.	Management and supervisor training in process, specialized training in process.	
6	All subelements in process or in place. Strong management leadership and commitment begun, metric systems in place, resourcing appropriate.	Employee representatives functioning, joint committees functioning, participating in risk assessment and accident investigation.	At least four subclements functioning and remaining three in process, employee participation beginning to spread through organization.	Medical and safety programs strengthesing. Emergency preparedness program established and exercised.	Management training in process developed, supervisor training developed, training recordkeeping and recall system developed.	
5	Management commitment and leadership accepted by workers, worker participation and commitment begun, metric system.	Employee representatives appointed/elected, committees beginning to perform functions (investigation, analysis, process improvement).	All subelements established, employees beginning to participate.	Rules written, medical and safety programs developing Personal Protective Equipment adequate.	Training template completed for all personnel, training needs identified, process development begun, recordkeeping and recall system being developed.	

		adequate.	begun, recordkeeping and recall system being developed.
Score	> 36 points (Annual Score)	>28 points (Annual Score)	≤ 16 points (Quarterly Score)
LTIR	and ≤.50% of the LTIR for the applicable SIC rate Exception: Contractors with less than 100 employees located onsite MSFC shall have no lost time injuries during the past year.	and < the applicable SIC rate Exception: Contractors with less than 100 employees located onsite MSFC shall have no more than one lost time injury during the past year.	or > the applicable SIC rate Exception: Contractors with less than 100 employees located onsite MSFC. A Level III rating will be given when greater than two lost time injuries are reported during the past year.
Grade Levels	I	II	III
Recognition	Formal award publicly recognized. Appropriate Past Performance referrals provided.	Formal letter of commendation – will impact contract evaluation and past performance. (Score must either be the same score or and higher from the last evaluation.)	Formal letter expressing concern. Corrective Action Plan requested. Data placed in Past Performance Database. Failure to improve could result in Contract Options not being exercised.
	Score LTIR Grade Levels	Score ≥ 36 points (Annual Score)	Score Score Sa6 points (Annual Score) Score



3rd Party Assessment

- Conducted by Star Consultants, Inc. in late 04
- Overall score 66% (80% considered VPP "Star" equivalent)
- Our 2005 Plan
 concentrates on
 "critical" elements
 deficiencies





Things We're Working On

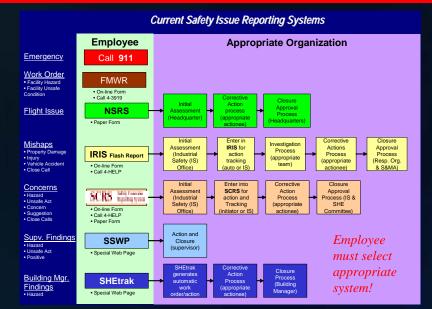
SHE Issue Reporting

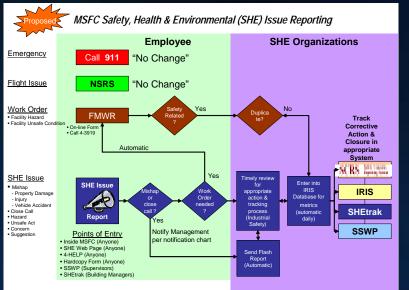
 Current process includes numerous reporting systems

Current

- Customer can be confused
- In-work is a simpler process
- One reporting process, we will select appropriate tracking system
- New input form that expands as needed for type issue being reported

In-work



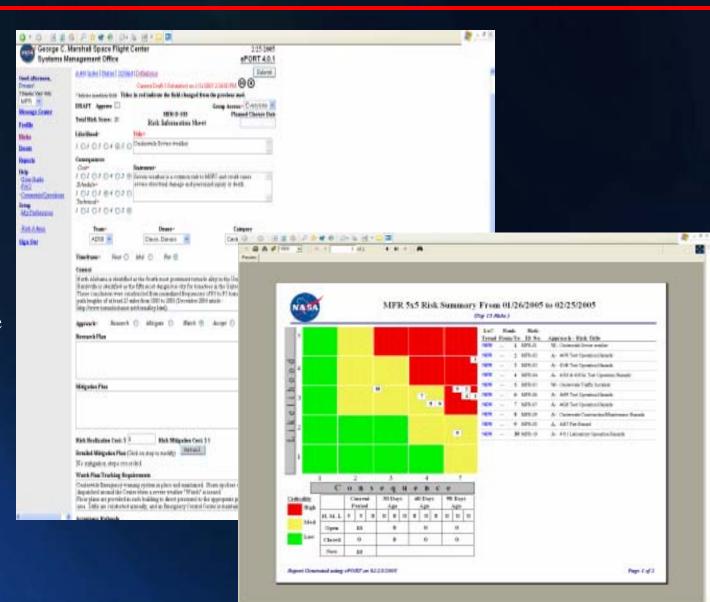




Things We're Working On

Risk Assessments

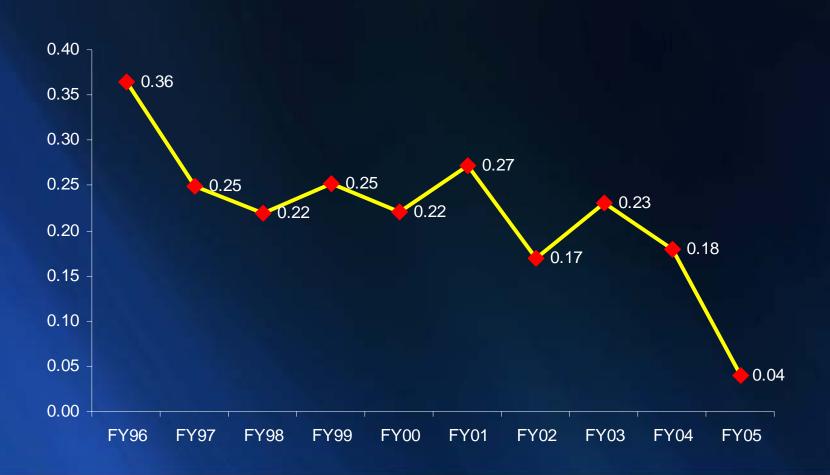
- Major facility and center wide hazards being assessed.
- Potential cost, schedule impact, and personnel injury being evaluated.
- Research or
 Mitigation Plans, or
 Watch or Acceptance
 Rationale are
 documented.
- Summary Reports
 will be provided
 periodically to
 Management to
 assure awareness of
 Major Risk





How We're Doing

Team (Civil Service and Contractors) Lost Time Incident Rate

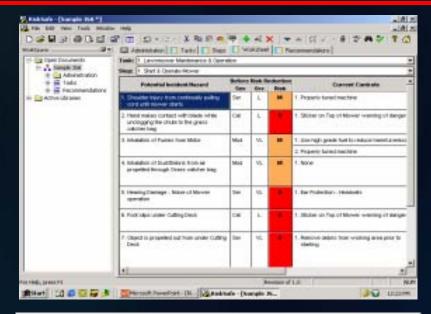


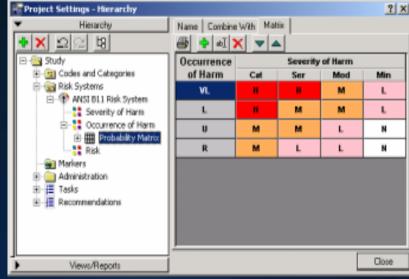


Proposed NASA Wide System

RiskSafe 6 (www.dyadem.com)

- Improve quality and consistency of the hazard identification and control process for both Industrial and Flight Safety
- Improve maintenance and recordkeeping of "live" hazard analysis documents
- Provide a common place to build a vast knowledge base of risk experience for future use
- Improve efficiency in performing labor intensive hazard assessments



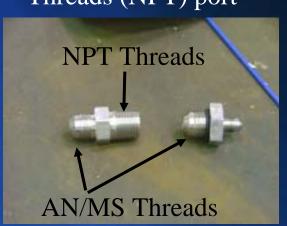




Recent Pressure System Mishap

What Happened

- Employee injured when high pressure fitting failed at 3000 PSI striking him on the head
- Cause Technician engaged non-compatible ½" Army Navy (AN/MS) type fitting into ½" National Pipe Threads (NPT) port





Reenactment of Dome Valve Test Mishap







NPT Port

NASA

Recent Pressure System Mishap (cont)

Corrective Actions

- Designed GO/NO-GO Gages (Neeley Gages) for 100% verification of ports
- Steel-Stamp markings on each port
- Reconfigure Kellum restraints for less movement.



Typical Steel-Stamp Marking



NPT Port



AN/MS Port



The End

Questions?